

## REMARKS

This Amendment is submitted preliminary to the issuance of an Office Action in the present application and in response to the Official Action of August 15, 2008.

Claims 3-6 are pending in the application. Claims 3, 4, 6 have been amended. No claims have been canceled or added. No amendment to the specification has been made. No claim fee is due.

It is noted that claim 3 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended claim 3 to provide antecedent basis the limitation "the magnet". Withdrawal of the rejection of claim 3 under 35 U.S.C. §112, second paragraph is thus respectfully requested.

Claim 6 has been amended to delete the redundant ";".

Claims 3-6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 4,779,155 to Elsaesser et al. in view of U.S. Pat. No. 6,642,508 to Setbacken et al.

Applicant has amended claim 4 to clearly recite the positional relationship between the bearing, ferrofluid seal and coding disk. More specifically, claim 4 sets forth the disposition of the coding disk on the shaft, the disposition of the bearing, ferrofluid seal, and the coding disk in the direction of the axis, as defined by the shaft, and the disposition of the, ferrofluid seal in close proximity to the bearing and the coding disk.

The primary reference Elsaesser et al., applied by the Examiner, discloses a disk storage drive having a shaft (132) supported by bearings (133). Placed next to the bearings on one side of the shaft is a ferrofluid seal to prevent passage of dust particles from the bearing system into a clean chamber (149), see col. 10, ll. 16-19. The Examiner readily acknowledges the absence of a coding disk disposed on the sensor shaft. To bridge the absence of teaching, the Examiner applies the Setbacken reference which describes the use of an encoding disk (30) positioned between a light source (22) and a light sensor (24). More specifically, the Examiner asserts that

*"It would have been obvious to one of ordinary skill in the art to provide an optical encoder and a coding disk of Setbacken et al. disposed on the sensor shaft at a distance to the bearing instead of magnetic position sensor, on the device of Elsaesser et al. for the purpose of making the device compact."* Applicant respectfully disagrees with this line of reasoning.

Both, in Setbacken and Elsaesser, the encoding disk and the position sensor, respectively, are disposed at a **radial** distance to the shaft. In other words, when replacing the position sensor of Elsaesser with the encoding disk of Setbacken, the claimed limitation of disposing the coding disk **on** the sensor shaft is not met. The suggestion by the Examiner to position the encoding disk of Setbacken on the shaft in Elsaesser not only demonstrates that the Examiner fell in the hindsight trap by using the claimed invention as an instruction manual or "template" but in fact cannot be reconciled with the disclosure in Elsaesser. As described in Elsaesser in col. 9, ll. 24-28 and illustrated in Fig. 5, the position sensors are intentionally positioned peripherally with respect to the coils in order to meet their task. Moving the position sensors, as suggested by the Examiner, would defeat the operation, as contemplated by Elsaesser.

Obviousness requires a suggestion of all the elements in a claim and a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in a way the claimed new invention does. *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 [82 USPQ2d 1385] (2007). It is applicant's contention that the Examiner has not identified all the elements of claim 4, nor provided any reason that would have prompted the artisan to have arranged them in the manner necessary to reach the claimed invention. *Ex Parte Alexander*, 86 USPQ2d, 1120, 1122, U.S.P.T.O. Board of Patent Appeals and Interferences (2007).

In summary, the prior art fails to teach

- 1) the disposition of the coding disk on a sensor shaft,
- 2) the close proximity of the ferrofluid seal to the bearing, on one hand, and the coding disk, on the other hand, and

3) the alignment of the bearing, ferrofluid seal and coding disk in axial direction.

For the reasons set forth above, it is applicant's contention that neither Elsaesser et al. nor Setbacken et al., nor a combination thereof teaches or suggests the features of the present invention, as recited in claim 4.

As for the rejection of the dependent claims, these claims depend on claim 4, share its presumably allowable features, and therefore it is respectfully submitted that these claims should also be allowed.

Reconsideration and allowance of the present application are thus respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly appreciate such a telephone interview.

Respectfully submitted,

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